**Title:** Analyzing the Association Between Marital Status and Education Level Using the Chi-Square Test of Independence.

#### ****Objective:****

To determine if there is a significant association between **Marital Status** and **Education Level** using the Chi-Square Test of Independence in SPSS.

#### ****Variables:****

**Marital Status (Categorical):**

* + Single
  + Married

**Education Level (Categories)**

* + High School
  + Bachelor's Degree
  + Master's Degree

Results:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Case Processing Summary** | | | | | | |
|  | Cases | | | | | |
| Valid | | Missing | | Total | |
| N | Percent | N | Percent | N | Percent |
| Marital\_Status \* Frequency | 300 | 100.0% | 0 | 0.0% | 300 | 100.0% |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Marital\_Status \* Frequency Crosstabulation** | | | | | | | | |
| Count | | | | | | | | |
|  | | Frequency | | | | | | Total |
| 15 | 20 | 35 | 50 | 80 | 100 |
| Marital\_Status | Married | 0 | 20 | 35 | 0 | 0 | 100 | 155 |
| Single | 15 | 0 | 0 | 50 | 80 | 0 | 145 |
| Total | | 15 | 20 | 35 | 50 | 80 | 100 | 300 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 300.000a | 5 | .000 |
| Likelihood Ratio | 415.555 | 5 | .000 |
| N of Valid Cases | 300 |  |  |
| a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.25. | | | |

**Interpretation:**

Person Chi-Square =300.000

DF = 5

P-Value = 0.01

* The Pearson Chi-Square test result indicates a **statistically significant association** between marital status and education level at the **5%** significance level (**p-value = 0.01**).
* Since the p-value is less than **0.05**, we reject the null hypothesis, concluding that marital status and education level are not independent.

This suggests that the distribution of education levels varies significantly across different marital statuses in the sample.

#### ****Conclusion:****

The Chi-Square Test of Independence in SPSS shows that there is a significant relationship between marital status and education level.

Further research could investigate potential sociocultural or economic factors influencing this association.